

# Traveling Renewable Energy Kiosk “TREK”

*Rolling Down the  
Road to Renewable  
Energy*



Franklin PUD just completed building the new Traveling Renewable Energy Kiosk (TREK) trailer. Darroll Clark, Energy Services Manager, and Todd Blackman, Energy Services Specialist, had the idea to build this traveling kiosk in order to educate the community on the many benefits and challenges of renewable energy. It was partially funded through a BPA grant.

TREK was designed and built by Franklin PUD Energy Services team to show how alternative energy components can be integrated into a typical home. The PUD used a travel trailer because it is mobile and has many of the same energy needs a home would use (cooking, heating & cooling, lighting, hot water, computer, TV, etc.).

This rolling educational display is a good teaching tool, both inside the trailer and outside, where large groups of students and the public can watch a monitor which displays various renewable energy topics and monitors actual renewable energy production.

There is a compressor for a ductless heat pump which is mounted to the trailer tongue, with a ductless blower mounted to the inside walls. Photovoltaic electric solar panels are mounted to the front side of the trailer, producing electricity that is sent to the batteries where it is stored. A solar water heater panel is attached to the front of the trailer. It heats water by transferring the solar energy to the water tank through the coiled heat exchanger wrapped around the tank. The water is circulated by a motor getting its energy from a photovoltaic panel. A 200-watt wind turbine is mounted on the outside rear of the trailer, which also charges the batteries when the wind is blowing. Sensors can tell when the batteries are fully charged. When that occurs, the turbine stops spinning.

Franklin PUD hopes to educate students, customers, and the public on the functionality and challenges of renewable energy. For more information or to schedule a demonstration, please contact Todd Blackman at 546-5946.

